

372344

Rocky Gully Creek

This undulating region is dominated by low hills and broad rocky slopes. It is situated on the southern boundary of the study area, immediately east of the Ouse River valley. It is drained by the Shannon River and marshes have formed on rocks of the Lower Permian Supergroup which occur in this valley. Limited outcrops of Tertiary basalt occur in the south west but Jurassic dolerite covers most of the land system.

Gradational soils with a wide variety of colours typify lower components while yellowish brown or greyish brown profiles are common on upper slopes and crests. Surface horizons are often blanketed by 10 to 20 cm of litter in various stages of decomposition. Depth to bedrock was difficult to measure due to the rocky character of profiles.

Forests cover most components although some areas on lower slopes have been cleared and planted with improved pastures. *Eucalyptus delegatensis* dominates throughout while *E. amygdalina*-*E. coccifera* hybrids, *E. amygdalina*, *E. dalrympleana*, *E. pauciflora* and *E. rodwayi* may also occur. The understorey is characteristically open heath with *Cyathodes parvifolia*, *Lomatia tinctoria* and *Pultenaea juniperina*. *Poa* grassland is often scattered through these heaths.

Grazing and forestry are the main land uses. There is a low sheet erosion hazard on most components with waterlogging a potential problem in marshes and valleys.



Eucalyptus amygdalina forest on duplex soils of the broad lower slopes.

LAND SYSTEM

Rocky Gully Creek

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Area(ha):6741



| COMPONENT | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| PROPORTION(%) | 30 | 10 | 25 | 5 | 20 | 10 |
| RAINFALL (mm) | Approximate Annual Rainfall: 625-750 | | | | | |
| GEOLOGY | Jurassic dolerite | | | | | |
| TOPOGRAPHY | Hills with surrounding undulating terrain | | | | | |
| Position | Broad Lower Slopes | Wall Drained Flats | Mid Slopes | Valley Flats | Upper Slopes | Crests |
| Typical Slope(°) | 3-5 | 3 | 3-5 | 3-5 | 3-5 | 0-5 |
| NATIVE | | | | | | |
| Structure | Open Forest | Open Forest | (Tall) Open Forest | Open Forest | Open Forest | Open Forest |
| Floristic Association (See Appendix 1 for common names) | Eucalyptus delegatensis E. amygdalina E. coccifera/amygdalina E. pauciflora Acacia dealbata Lomatia tinctoria Lomandra longifolia | Eucalyptus delegatensis E. amygdalina/coccifera Acacia dealbata Cyathodes parvifolia Lissanthe montana Lomatia tinctoria Pultenaea juniperina Lomandra longifolia Poa sp. | Eucalyptus delegatensis E. amygdalina /coccifera Acacia dealbata A. melanoxylon Cyathodes parvifolia Pultenaea juniperina Lomandra longifolia Poa sp. | Eucalyptus delegatensis Leptospermum lanigerum Gahnia grandis Cyathodes parvifolia Olearia phlogopappa Juncus sp. Poa sp. | Eucalyptus delegatensis E. coccifera Acacia dealbata Cyathodes parvifolia Lomatia tinctoria Lissanthe montana Pultenaea juniperina Exocarpos cupressiformis Poa sp. | Eucalyptus coccifera E. pauciflora E. rodwayi Acacia dealbata Cyathodes parvifolia Lissanthe montana Monotoca glauca Lananora longifolia Poa sp. |
| SOIL-Surface(A)Texture | Loam-Clay Loam | Loam | Loam | Peat but silty clay loam in places | Organic Loam | Organic Loam |
| B Horizon(subsoil) Colour (wet) Texture and primary profile form | Stony, dark brown (10 YR 3/3) to dark reddish brown (5 YR 3/3) medium to heavy clay. Duplex. | Stony, gravelly, yellowish brown (10 YR 5/4) to brown (10 YR 5/3) sandy clay loam. Dark reddish brown (5 YR 4/4) in places. Uniform. | Stony, gravelly, yellowish brown (10 YR 5/4) to brown (10 YR 5/3) clay loam. Gradational/Uniform. | Stony, black (7.5 YR 2/0) light clay. Organic. | Stony, gravelly/ dark greyish brown (10 YR 4/2) sandy clay. Duplex. | Stony, mottled yellowish brown (10 YR 5/8), greyish brown (10 YR 5/2) medium clay. Duplex. |
| Permeability | Moderate-Low | High-Moderate | High-Moderate | | High-Moderate | Moderate-Low |
| Typical depth(m) | >1.50 | >0.50 | >0.50 | >0.30 | >0.30 | >0.40 |
| Depth(A)Horizon | 0.05-0.15 | 0.05 | 0.05-0.10 | 0.10 | 0.10 | 0.05 |
| LAND USE | Forestry, grazing | | | | | |
| HAZARDS | | Low sheet erosion | | Waterlogging | | Low sheet erosion |